# ¶CONSTRUCTION AND USE OF RECOMBINANT PARAINFLUENZA VIRUSES EXPRESSING A CHIMERIC GLYCOPROTEIN

## ABSTRACT OF THE DISCLOSURE

Chimeric parainfluenza viruses (PIVs) are provided that incorporate a PIV vector genome or antigenome modified to encode a chimeric glycoprotein incorporating one or more heterologous antigenic domains, fragments, or epitopes of a second, antigenically distinct HPIV. These chimeric viruses are infectious and attenuated in humans and other mammals and are useful in vaccine formulations for eliciting an immune responses against one or more PIVs, and, optionally against respiratory syncytial virus (RSV). Also provided are isolated polynucleotide molecules and vectors incorporating a chimeric PIV genome or antigenome which includes a HPIV vector genome or antigenome combined or integrated with one or more heterologous genome segment(s) encoding one or more antigenic determinant(s) of a heterologous PIV to encode a chimeric glycoprotein. In preferred aspects of the invention, the chimeric virus is attenuated for use as a vaccine agent by additional mutations or nucleotide modifications introduced into the chimeric genome or antigenome.